

Patent claims

1. A polyester film which has a base layer (B) and has, applied to this base layer (B), at least one overlayer (A) which has been coated with a barrier layer (D), wherein the base layer (B) comprises poly(m-xylenedipamide), and the barrier layer (D) is composed of a blend in which a film-forming substance and a copolymer of maleic acid and acrylic acid are present.
2. The polyester film as claimed in claim 1, wherein the base layer (B) comprises from 5 to 40% by weight of poly(m-xylenedipamide), based on the weight of the base layer (B).
3. The polyester film as claimed in claim 1, wherein the overlayer (A) comprises poly(m-xylenedipamide).
4. The polyester film as claimed in claim 1, wherein the melt viscosity of the poly(m-xylenedipamide) is smaller than 2000 poises.
5. The polyester film as claimed in claim 1, wherein the base layer (B) comprises thermoplastic polyester.
6. The polyester film as claimed in claim 5, wherein the thermoplastic polyester of the base layer (B) has at least one of ethylene glycol units and terephthalic acid units, and ethylene glycol units and naphthalene-2,6-dicarboxylic acid units.
7. The polyester film as claimed in claim 5, wherein the polyester of the base layer (B) has isophthalic acid units, terephthalic acid units, and ethylene glycol units.
8. The polyester film as claimed in claim 5, wherein polyethylene terephthalate is used as polyester of the base layer (B).

9. The polyester film as claimed in claim 1, wherein polyvinyl alcohol is used as film-forming substance for the barrier layer (D).
10. The polyester film as claimed in claim 9, wherein the polyvinyl alcohol has a molecular weight greater than 15000.
11. The polyester film as claimed in claim 1, wherein the copolymer of maleic acid and acrylic acid in the barrier layer (D) has an average molecular weight of from 1500 to 15000.
12. The polyester film as claimed in claim 1, which has a D-A-B-C layer structure, A and C being overlayers which may be identical or different.
13. The polyester film as claimed in claim 12, wherein at least one of the overlayers (A) or (C) comprise a polyester used for the base layer (B).
14. The polyester film as claimed in claim 1, wherein the overlayer (A) has a gloss greater than 100.
15. The polyester film as claimed in claim 1, which has an oxygen transmission (OTR) smaller than $25 \text{ cm}^3 \cdot \text{m}^{-2} \cdot \text{d}^{-1} \cdot \text{bar}^{-1}$.
16. The polyester film as claimed in claim 1, which has an opacity smaller than 20%.
17. The polyester film as claimed in claim 1, wherein the adhesion between the layers of the film is greater than 0.5 N/25 mm.
18. A process for producing a polyester film as claimed in claim 1, encompassing the steps of

- a) production of a multilayer film by coextrusion,
- b) longitudinal stretching of the film,
- c) coating of the film with the barrier layer (D),
- d) transverse stretching of the coated film, and
- e) heat-setting of the stretched film.

19. Packaging film comprising polyester film as claimed claim 1.

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